

Title (en)
Antenna device and communication apparatus

Title (de)
Antennenvorrichtung und Kommunikationsgerät

Title (fr)
Dispositif d'antenne et appareil de communication

Publication
EP 1978595 A2 20081008 (EN)

Application
EP 08160793 A 20041224

Priority

- EP 04807694 A 20041224
- JP 2003430022 A 20031225
- JP 2004070875 A 20040312
- JP 2004071513 A 20040312
- JP 2004228157 A 20040804
- JP 2004252435 A 20040831
- JP 2004302924 A 20041018

Abstract (en)
An antenna device (1) includes a substrate (2) which is made of an insulating material such as a resin, a rectangular conductor film (121) disposed on a surface of the substrate (2), first and second loading sections (123,124) which are disposed on the surface of the substrate (2) to be parallel to the conductor film (121), an inductor section (125) which connects base ends of the first and second loading sections (123,124) to the conductor film (121), a feed section (126) which feeds a current to a connection point P of the first and second loading sections (123,124) and the inductor section (125), and a feed conductor (127) which connects the connection point P to the feed section (126).

IPC 8 full level
H01Q 1/38 (2006.01); **H01Q 1/24** (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/321** (2015.01); **H01Q 5/328** (2015.01); **H01Q 5/335** (2015.01); **H01Q 5/371** (2015.01); **H01Q 9/04** (2006.01); **H01Q 9/42** (2006.01); **H01Q 21/30** (2006.01)

CPC (source: EP KR US)
H01Q 1/24 (2013.01 - KR); **H01Q 1/243** (2013.01 - EP US); **H01Q 1/38** (2013.01 - EP KR US); **H01Q 5/00** (2013.01 - KR); **H01Q 5/321** (2015.01 - EP US); **H01Q 5/328** (2015.01 - EP US); **H01Q 5/335** (2015.01 - EP US); **H01Q 5/371** (2015.01 - EP US); **H01Q 9/42** (2013.01 - EP US); **H01Q 21/30** (2013.01 - EP US)

Citation (applicant)

- JP 2002319811 A 20021031 - MURATA MANUFACTURING CO
- JP 2002271123 A 20020920 - MITSUBISHI MATERIALS CORP, et al
- EP 1291968 A1 20030312 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- JP H1127041 A 19990129 - F I I C KK, et al

Cited by
FR2967537A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1703586 A1 20060920; **EP 1703586 A4 20080123**; AT E503287 T1 20110415; CN 102683839 A 20120919; CN 102709687 A 20121003; CN 102709687 B 20130925; CN 1926720 A 20070307; DE 602004031989 D1 20110505; EP 1978595 A2 20081008; EP 1978595 A3 20081217; EP 1978595 B1 20110323; HK 1176172 A1 20130719; KR 100995265 B1 20101119; KR 101007529 B1 20110114; KR 20060129307 A 20061215; KR 20100110368 A 20101012; TW 200537735 A 20051116; TW I343671 B 20110611; US 2007285335 A1 20071213; US 2010289708 A1 20101118; US 2011221642 A1 20110915; US 7777677 B2 20100817; US 7859471 B2 20101228; US 8212731 B2 20120703; WO 2005064743 A1 20050714

DOCDB simple family (application)
EP 04807694 A 20041224; AT 08160793 T 20041224; CN 200480042026 A 20041224; CN 201210182936 A 20041224; CN 201210183980 A 20041224; DE 602004031989 T 20041224; EP 08160793 A 20041224; HK 13103308 A 20130318; JP 2004019337 W 20041224; KR 20067014970 A 20041224; KR 20107018354 A 20041224; TW 93140610 A 20041224; US 59681204 A 20041224; US 78817510 A 20100526; US 78874910 A 20100527